



File Code: 3410

Date: October 23, 2009

Jason Lott
Superintendent
Bandelier National Monument
15 Entrance Road
Los Alamos, NM 87544

Dear Mr. Lott:

During July 7 through July 20, Daniel Ryerson and Crystal Tischler, of our staff, conducted our annual insect and disease survey flights over the Santa Fe National Forest and associated lands. Crystal joined our staff in September 2008 and will be taking on the role of primary surveyor in New Mexico. This year was a period of transition as Crystal, who had previous aerial survey experience in Colorado, became familiar with New Mexico's forest types, topography, and our survey procedures. While we strive to make our surveys as consistent as possible, mapping styles vary slightly between observers.

A map and table summarizing the results of surveys for the Santa Fe NF including Bandelier NM are enclosed. The map also includes activity observed on State and private lands which were surveyed June 29 through July 6 by Stephani Sandoval, New Mexico State University Cooperative Extension Service, with the assistance of Crystal Tischler and Daniel Ryerson. Following is a brief summary of the survey results for Bandelier NM, the Santa Fe NF, and adjacent lands:

Bandelier National Monument

Throughout Northern NM, defoliation by western spruce budworm remained the most widespread insect activity observed this year. Nearly 1,500 acres were mapped with western spruce budworm defoliation on the northern portion of Bandelier NM. Only minor amounts of bark beetle activity in ponderosa and Douglas-fir were detected. No aspen defoliation was detected. Unfortunately, the San Miguel fire was burning during the time of our survey, so the entire area of Bandelier was not thoroughly surveyed.

Lands within the Santa Fe NF Administrative Boundary

Over 108,000 acres with defoliation from western spruce budworm were mapped this year, up from the 85,000 acres last year. Aspen defoliation decreased to 4,130 acres in 2009. As we have reported the past two years, we have been trying to distinguish areas with aspen mortality from those that are defoliated from current year insect and disease activity. This year approximately 3,900 acres were mapped with some level of aspen decline. Crystal's previous experience surveying in Colorado heightened her awareness of aspen decline. This year she observed more areas with aspen decline than we had been previously mapping. While the numbers alone show an increase from the acres mapped in 2007 - 2008, this should not be interpreted as a large aspen mortality event. The areas mapped during 2007 - 2008 typically had substantial levels of mortality. The additional areas mapped this year include



aspen stands with varying levels of mortality, including stands with dying crowns, one of the early indications of decline in a stand. We will continue to refine our mapping of aspen as we learn more about the health of this species in the Southwest.

Overall bark beetle activity on the Santa Fe NF continued to decline in 2009. The corkbark fir mortality that was extensively mapped in 2007 and 2008 subsided greatly this year. Slightly less than 2,000 acres were mapped with mortality compared to the 18,500 acres last year. Douglas-fir beetle activity remained similar to last year with approximately 1,600 acres with mortality. Mortality in other tree species was minor.

Valles Caldera National Preserve

Defoliation by western spruce budworm was quite evident on the preserve, covering over 34,000 acres. Both aspen defoliation (140 acres) and decline (1,190 acres) were observed across the VCNP. Other insect damage included minor amounts of Douglas-fir and fir engraver bark beetle activity.

Adjacent Tribal Lands

An increase in defoliation by western spruce budworm was also observed on Santa Clara Pueblo lands in 2009. Some Douglas-fir mortality was observed on Santa Clara Pueblo lands.

The enclosed map and table provide additional detail. The GIS data files for the survey results are available at: http://www.fs.fed.us/r3/gis/nm_data.shtml. If you have questions regarding the survey or the data, please contact either of our observers: Daniel Ryerson at (505) 842-3285, dryerson@fs.fed.us or Crystal Tischler, at (505) 842-3284, cgtischler@fs.fed.us.

Sincerely,

/s/ Debra Allen-Reid
DEBRA ALLEN-REID
New Mexico Zone Leader, Forest Health

Enclosures: table and map

cc: Don Bright
John Anhold
David A Conklin
Terry J Rogers
Daniel E Ryerson

Electronic copy of letter, report, table and map to: craig_allen@usgs.gov, john_mack@nps.gov